Work	Order	ID -	983	09
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98309

Page 1

March-12-13 1:46:	37 PM		90.1	U9 	and the same of th					
Revision ID: Item Name: Door	229 ubler 1/13 Start Oty: \$	24)	Accept	*N900		100)* s	etup Start	171	S1* S2*
Required Date: 3/2				Cust Item I	D:					
Reference:	• • • • •	in					•		,	
Approvals: Pr	rocess Plan:	Date: 13-03-15	Tooling:	D	ate:		R	tun Start	"17	R1*
	C:		SPC (Y/N):	D	ate:			Stop	*N	R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D2229	Rev B									
100			0.00							
100	FLOW WATER J	ET					24	0		1113-5-7
Waterjet FLOW CNC Waterjet ユロシス・シー		t as per Dwg D2229 Dwg Rev:_ err if necessary	B Prog Rev: B	<u>·</u> 2-					·	
110	QC2- Inspect part	s off machine FAI/FAIB	0.00							
110 QC			0.00				24	<u></u>		JM13-5-
Quality Control	Mem	10	0.00							
120	QC8- Inspect part	s - second check	0.00				0/1			
120							27 N			
QC Quality Control	. Mem	10	0.00 BS	7			count			

NCR:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____Date: ____

NCK:	res	/ NO				WORK ORDER NON-	CON		TANCE / OF DATE	QA Closed:	Date:	
Work Orde	er: ˌ					DISPOSITION	_,			EPARTMENT/	-	,
Part i	No.					Rework Scrap Use-as-is		٨	Skid-tube Crosstube Machining Small Fab oforming Finishing	-	Water Jet d. Eng. Coor e/Packaging	Engineering Quality Other
NCR I	No.					Work Order Update]		Large Fab Composite]. Kec/stor	Supplier	
Root					Descri	iption of work order update	Ir	nitial	Action	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chi	ef Eng	Description	Date	Verification	QC Inspector
oc/Data quip/Tooling										1	· .	
perator Naterial												
etup Other												
rocess upplier				·	i					1		
raining napproved										,		
							FAUL	CATE	GORY	·		
Landi	ng (Gear				General				7	 -	-
•		Bending Centre No	ot Concer	ntric to	o/s	Bend BOM/Route	\vdash	Grain Hardwar	re	Ovalized Over/Under	tolerance	Pressure/Forced Temperature/Cure
		Cracks				Broken/Damaged	Ш	Inspection	on Incomplete	Part Incorred		Weld
		Crushed/0	Crimped.			Burrs	Ш	Instructi	ons Incomplete/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance	Part Moved		
		Heat Trea	t			Countersink		Mislabel	ed	Positioned V	Vrong	-
		Inspection	Strip in	Tube		Cut Too Short		Misread		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset				
		Torque W	aves in E	xtrusio	n 🗀	Drawing		Out of C	alibration			
		Turning So	equence			Finish	П	Out of S	equence			
		Wave/Tw		e e		Folio		Outside	Dimensions			

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Work Orde March-12-13 1:					*98:	309*						Page 2
Revision ID: Item Name:	D2229 Doubler 3/11/13	Start Qty: 12.00		*12*	Accept	*N900		100)*	Setup Sta	iV	S1* S2*
Required Date: Reference:		Req'd Qty: 12.00		*12*		Customer:						
Approvals:		s Plan:	Date:_ Date:_		Tooling: SPC (Y/N):		ate:		I	Run Sta Sto	" \	R1*
Sequence ID/ Work Center II 130 *130*)	Operation Description Small Fab			Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Oty	Reject Number	Insp. Stamp
Small Fab Small Fab		Memo Deburr. No sl	narp edges		0.00	HA						
*140		Chemical Conversion Coa	nt per QSI0	05 4.1	0.00				24	" Me	130	58
HandFinish Hand Finishing		Мето			0.00				<u> </u>			-

150 *150* QC

Quality Control

QC3 Inspect Part Finish

Memo

es/	/ No				WORK ORDER NON-C		NFORI	MANCE / UP	DATE		QA Closed:	Da	ate:	
er:					DISPOSITION				_	EF	PARTMENT/			
No.					Rework Scrap Use-as-is Work Order Update		Thern	Machining	Crosstube Small Fab Finishing Composite			d. Eng. Coor. e/Packaging		Engineering Quality Other
	Date	Step	Qty		•						Sign & Date	Verification	on	QC Inspector
					·							٠.		·
					F	AUL	T CATE	GORY						
	Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection	Crimped, et n Strip in i Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Inspect Instruct Mainte Mislabe Misread Offset	ion Incomplete cions Incomplete, enance eled d	/Unclear		Part Incorred Part Lost/Mi Part Moved Positioned V	ct ssing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	ng (ng Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection Ripples in	Date Step Date Step	Date Step Qty Date Step Qty Date Step Cty Date Step Cty Cty Date Step Cty D	Date Step Qty Descri Date Step Qty Descri Control Date Step Qty Control Date Step Qty Control Date Step Qty Descri Control Date Step Qty Control Date S	Part Step Qty Description of work order update or Non-conformance Date Step Qty Description of work order update or Non-conformance	Part	Part Cate Part Par	Part DISPOSITION Rework Scrap Use-as-is Work Order Update Large Fab Large Fab Description of work order update Chief Eng Description Order Description Order Chief Eng Description Order Desc	Part	DISPOSITION Rework Skid-tube Crosstube Machining Small Fab Large Fab Composite No. Date Step Qty Description of work order update Initial Action Description Date Step Qty Or Non-conformance Chief Eng Description FAULT CATEGORY Rework Skid-tube Crosstube Machining Small Fab Large Fab Composite Intermoforming Finishing Large Fab Composite Composite Description FAULT CATEGORY Rework Skid-tube Composite Machining Small Fab Large Fab Composite Intermoforming Finishing Large Fab Composite Remoful Description Description FAULT CATEGORY Rework Skid-tube Composite Initial Chief Eng Description Remoful Description Description FAULT CATEGORY Rework Skid-tube Composite Initial Chief Eng Description Remoful Description Description Description FAULT CATEGORY FAULT CATEGORY Rework Skid-tube Composite Initial Chief Eng Description Remoful Description Description Description Remoful Description Description Description Remoful Skid-tube Composite Initial Chief Eng Description Remoful Description Description Description Description Remoful Description Description Description Description Remoful Description Description Description Description Description Remoful Description Description Description Description Description Description Description Description Descript	Procession DISPOSITION	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Date Verification Date Veri	DISPOSITION Rework Scrap Use-as-is Work Order Update Uarge Fab Composite Sign & Verification Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date Step Qty Or Non-conformance Or Non-conformance

Out of Sequence

Outside Dimensions

DQA: _____ Date: __

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord		3309		*983	309*							Page	3
Item ID: Revision ID:	D2229			Accept	*N90	0040	100	ገ*	Setup	Start	*N	S1*	
Item Name:	Doubler	•						•		Stop	*N	S2*	
Start Date: Required Date:	3/11/13 : 3/22/13	Start Qty: 12.00 Req'd Qty: 12.00	•	2* 2*	Cust Iten Custome								
Reference:		·											
Approvals:	Process Pl	an:	Date:	Tooling:	· · · · · · · · · · · · · · · · · · ·	Date:			Run	Start Stop	*N	R1*	
	QC:		Date:	SPC (Y/N):		Date:				Stop	*N	R2*	
Sequence ID/ Work Center I	D	Operation Description Identify as per dwg & Sto	ock Location:	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Re Qt		Reject Number	Insp. Stamp	
160 Packaging Packaging		Memo		0.00				24	<u> </u>	·		13-5	=/3
170		QC21- Final Inspection -	Work Order Relea	se 0.00					10	ر ا	112	JJ.	
170 QC Quality Control		Мето		0.00					12	19 1	115 115	13-0	<u>513</u>

⁄es	/ No				WORK ORDER NON-O	100	VFOR	MANCE / UPI	DATE	QA Closed:	Date:	
er: .					DISPOSITION Rework Scrap Use-as-is			Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality Other
۱o. ₋					Work Order Update			Large Fab	Composite]	Supplier	
	Date	Step	Qty							Sign & Date	Verification	QC Inspector
						AUI	T CATE	GORY				
	Bending Centre No Cracks Crushed/F Cuffs Heat Trea Inspection Ripples in	Crimped. It In Strip in I Bend Vaves in E	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Inspect Instruct Mainte Mislabe Misread Offset Out of	ion Incomplete ions Incomplete/U enance eled d Calibration	Jnclear	Part Incorred Part Lost/M Part Moved Positioned V	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	ng (ng Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection Ripples in Torque W	Date Step Date Step	Date Step Qty Date Step Qty Date Step Cty Date Step Cty Cty Date Step Cty D	ng Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance Bending Bending Bend BoM/Route Broken/Damaged Burrs Cracks Broken/Damaged Burrs Contamination Countersink Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Drawing DISPOSITION Rework Scrap Use-as-is Work Order Update or Non-conformance Fend Gear General Bend Contamination Countersink Cut Too Short Drill Holes Drawing	Part Pa	PAULT CATE Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance FAULT CATE Remain Bending Centre Not Concentric to O/S Cracks Broken/Damaged Broken/Damaged Inspect Instruct Broken/Crimped Cushed/Crimped Cuffs Heat Treat Countersink Cuffs Heat Treat Countersink Cust Too Short Cust Mislabe Ripples in Bend Counter Not Offset Counter Waves in Extrusion Cuffs Countersink Cut Too Short Cuffset Counter Gotter Counter Short Cust Gotter Counter Short Cust Gotter Cust Gotter Counter Short Cust Gotter Cust Got	Processing Strip in Tube Rework Skid-tube Machining Use-as-is Work Order Update Use as-is Work Order Update Or Non-conformance Use as-is Work Order Update Order Eng Use	Part	AGAINST DEPARTMENT, Skid-tube Crosstube Machining Small Fab Pro No. Scrap Use-as-is Work Order Update Date Step Qty Or Non-conformance Step Qty Or Non-conformance Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Date Step Qty Or Non-conformance Chief Eng Description Date Date Date Date Date Date Date Date	Disposition Rework Skid-tube Crosstube Water Jet Machining Small Fab Prod. Eng. Coor. Rec/Store/Packaging Large Fab Composite Step Qty Or Non-conformance Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Step Qty Or Non-conformance Chief Eng Description Date Verification Date V

Outside Dimensions

DQA: ____ Date: _

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

March-12-13 1:46:37 PM

Work Order ID:

98309

Parent Item:

D2229

Parent Item Name:

Doubler

Start Date: 3/11/13

Required Date: 3/22/13

Page 1

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP: A02.06.05New IssueNG

IPP Rev:B 07-08-15 Now On WaterJet JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063		Purchase	ed	No	·		100	sf	156.7400	0.0521	0.658T052			7,412 =
2024-T3 .063 sheet											0.75	· · · · · · · · · · · · · · · · · · ·		JM13-5
					<u>Location</u>		Loc Qty	<u>Lo</u>	oc Code		·			
					MAT022		156.74							
					119	916	0.2							
					121	197	21.34							
					123	096	11.4							
					123	654	12.8							•
					123	701	111			123	701			•

											DQA:	Date	j:
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UPDATE		QA Closed:	Date	2:
Mark Ords				_	- · · · · · · · · · · · · · · · · · · ·	DISPOSITION			AGAII	NST DE	PARTMENT,	/PROCESS	
Work Orde Part N	۰ . No					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Crossto Machining Small noforming Finish Large Fab Compo	Fab ing	ł	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update		Initial	Action		Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
						F	AUI	LT CATE	GORY				
Landi		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio	Crimped.		o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		4 '	on Incomplete ions Incomplete/Unclear nance led		Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Ripples ir	n Bend			Drill Holes		Offset		-			

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

DART AEROSPACE LTD	Work Order:	98309
Description: Doubler	Part Number:	D2229
Inspection Dwg: D2229 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing	Tolerance	Actual	Accept	Reject	Method of	Comments
Dimension	Tolerance	Dimension	Accept	Reject	Inspection	Comments
2.50	+/-0.030	2 502'			U	Jamos
1.810	+/-0.010	1.812"	_		U	
0.690	+/-0.010	0.693	_		V	
3.00	+/-0.030	3,005	_		U	
2.343	+/-0.010	2.348"	_		V	
0.656	+/-0.010	2.348" 0.661" 0.312"	_		V	
Ø0.3125	+0.006/-0.001	0.312	_		V	
					.,	
		<u></u>			· · · · · · · · · · · · · · · · · · ·	
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	-	:				
						14,1.50
		·				
			_ As			

Measured by: Jip	Audited by:	27	Prototype Approval:	N/A
Date: 13-5-7	Date:	1357	Date:	N/A

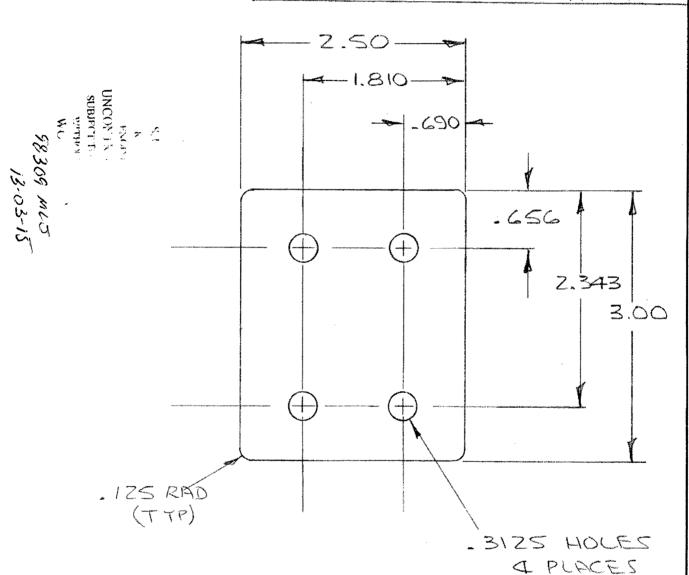
Rev	Date	Change	Revised by	Approved
Α	07.09.06	New Issue	KJ/JLM	E
			77	



REHOUEY	94.3.28	DART AERO ACCESSORIES INC VICTORIA INTERNATIONAL AIRPORT, CANADA		
DESIGN		DRAWING NO.	REV.	
BRADUEY	94.3.28	DZZZ SHEET	.ل. 1 OF /	

DOUBLER

Δ	MEW ISSUE		94/3/18	9
B	ALODINE WAS	ひいっちょう	27/11/06	9



MATERIAL: ZOZG-T3 ALUMINUM . OG 3 THICK

FINISH:

ALODINE PER QSI 005-4.1